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FINNSHEEP



GENERAL FACTS

Down to our day, Finland has retained an industrial structure largely dominated by livestock husbandry, a great part of its arable land being devoted to the production of roughage and concentrates, or used for grazing. Because of the country's situation in the north of Europe the pasture season for sheep extends over no more than about five months in its southern, and four months in its northern, sections. The pasture season begins in late May or in early June, and from then lasts until the end of October (or, September). During the rest of the year the sheep are kept indoors, when they are chiefly fed hay, and before lambing, small quantities of concentrated food. The most usual time for lambing is March to April.

Until the beginning of the grazing season, the primary nourishment of lambs is the ewes' milk, and consequently the ewes are then given more and stronger food, to enable lambs to reach satisfactory growth standards. The copious milk production of the ewes continues on the pasture, lambs sucking up to four of five months old and grazing besides, until, late in summer or early in autumn, they show live weights of 30 to 40 kilogram, at which they are ready for slaughtering. Relatively few animals are left to the indoor feeding season, highly prolific ewes, however, are kept for the subsequent spring, to produce a great number of lambs.

The Finnsheep is a breed developed from stock that has existed in Finland of old, remaining unmixed with other breeds. What with austere environmental conditions and what

with scanty feeding, these sheep have spontaneously become hardy animals whose requirements are small. They belong to the racial type of »Scandinavian Shorttails» which is marked by a short woolless tail, short ears, and a head covered only by guard hair. — The flocks are small in Finland, comprising 5 to 50 ewes each, but thanks to the breed's high prolificacy the sheep in flocks with improved animals are treble their initial number by the summer, and still more. — Lambing is easy, difficulties in parturition occurring but seldom as compared with the case of many other breeds. — Sheep sheds are cold, and the sheep are given opportunity during the winter, too, of outdoor exercise in yards where they move about in the snow.

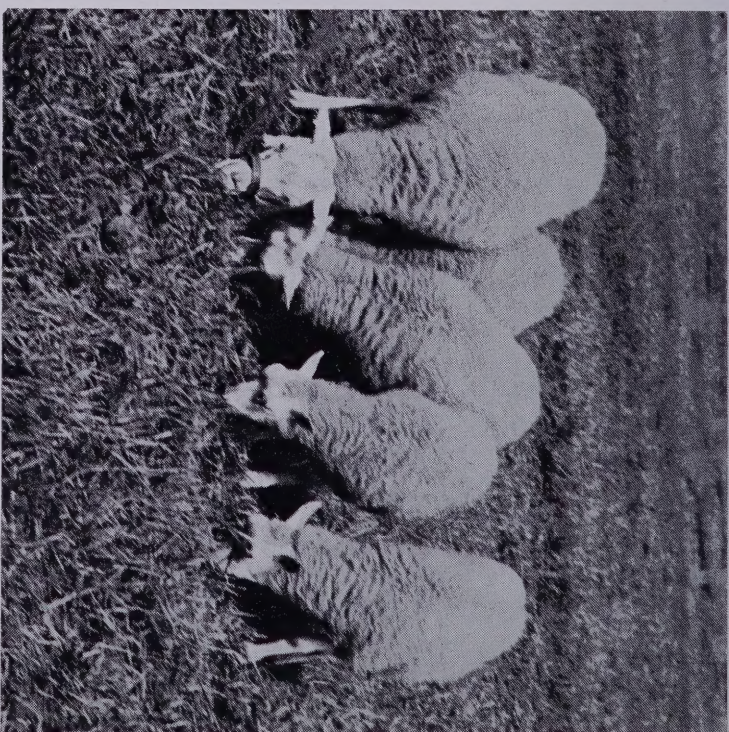
Systematic improvement of the Finnsheep breed was begun in 1918, the year when the Finnish Sheep Breeders' Association (Lampaanjalostusyhdistys) was founded as a directive centre of all sheep improvement done in this country. Since then, production recording has been carried out, those sheep that satisfy fixed requirements of performance being entered in the Flock Book on the basis of their records. Thus by purposefully selecting, for decades, the animals with a view to an increase of their size and to the improvement of wool quality and quantity, as well as by paying attention to degree of prolificacy, growth rate and ewes' milking qualities, a sound hardy breed of reliable transmitters of many properties has been moulded — the improved Finnish Native Sheep or Finnsheep.

PROLIFICACY

The Finnsheep breed is extraordinarily prolific. When starting their work, the breeders set themselves the task of raising prolificacy, and at that time laid down the following requirements for entry in the Flock Book:

- 1st Prolificacy Class: three times triplets, or twice, quadruplets
- 2nd " " : once triplets, or regularly, twins
- 3rd " " : twice twins, or twins at first lambing

Being continued from generation to generation by such rigorous principles, the selection has resulted in stabilizing the Finnish sheep's naturally high prolificacy. This purposeful selection work may indeed be given the credit for the fact, that high prolificacy has become one of the qualities in Finnsheep that are most reliably transmitted, an average of 2—2.5 lambs being born per ewe in improved flocks. The



Ewe KISA, N:o 2247, together with its four lambs, in the summer of 1964.

lowest requirement is at present regular twin births. Triplets are born frequently, four to five lambs per litter occur time and again, and sometimes the number is still greater.

FINNSHEEP WITH HIGH PROLIFICACY

Name and Flock Book number	Number of lambs born														In all	Ave- rage
	Age of ewe, in years															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Lipas 12345	—	3	2	3	2	2	4	3	3	3	3	3	2	1	34	2,6
Mursu 13305	2	4	2	0	3	5	3	4	4	4	2	0	4	3	36	2,8
Nella 13884	2	3	3	2	4	4	4	3	5	4	4	4			42	3,5
Alku 9059	—	2	3	3	3	3	3	4	0	3	3	2			29	2,6
Jutta 13004	2	2	2	3	3	3	3	3	3	2	3				29	2,6
Nippa 15588 V	—	3	6	2	3	3	3	2	3	2	2				29	2,9
Ulla II 14478	—	3	3	3	3	4	3	3	3	2	3				30	3,0
Tepsu 11289 P	—	3	2	3	4	4	3	4	3	5					31	3,4
Lelu 9279 V	2	3	3	3	4	5	4	2	2	2					30	3,0
Soma 12031	1	4	4	3	2	4	3	5	6						32	3,6
Luumu 11291 V	—	2	3	4	4	3	4	3	4						27	3,4
Elvi 15828	—	3	3	3	3	3	3	3	4	2					25	3,1
Musta 15982 P	3	3	3	4	4	4	2	3	2						28	3,1
Sohvi 15071 V	—	5	7	4	4	6	2	4							32	4,6
Tupu 17917	1	5	2	6	4	4									22	3,7
Santra 18469	4	4	4	4	5										17	4,2
Anu 19173	2	4	5	5											16	4,0

DATA ON PROLIFICACY IN SOME FINNSHEEP FLOCKS

repeated by no. of lambs born

Farmer	Year	Number of sheep to the ram	Number of dry ewes	Number of lambs born	Number of 1-lamb litters	Number of 2-lamb litters	Number of 3-lamb litters	Number of 4-lamb litters	Number of 5-lamb litters	Number of 6-lamb litters	Number of 7-lamb litters
Ilmari Tarkka, Parolannummi	1963 1964	34 45	—	81 98	5 4	32 62	30 24	4 8	10 —	—	—
Eero Yliviikari, Karaku	1963 1964	29 34	—	82 93	1 1	16 22	45 57	20 8	5	—	—
Elsa Rutanen, Vittasaari	1963 1964	27 33	—	66 81	2 1	24 34	36 42	4 4	—	—	—
Grazing Trial Station, Mouhijärvi	1962 1963 1964	19 19 25	3	60 41 60	1 — 3	8 6 18	24 21 27	20 8 12	—	6	7
Aarne Rulja, Luopioinen	1963 1964	16 20	—	45 50	1 2	6 14	30 30	8 4	—	—	—
Hannes Huhtinen, Haukivuori	1963 1964	8 20	1	23 47	3	6 16	12 15	8	5	—	—
Jukka Jalkanen, Rautalampi	1963 1964	8 18	—	28 57	1	12	15 18	8 20	5	—	—
W.A. Westerstråhle, Rantasalmi	1963 1964	13 15	—	37 46	2	6 10	15 18	8	10	6	—
Pirkko Anttila, Pöytyä	1963 1964	9 14	1	25 42	2	2 8	12 9	4 20	5	—	—
Hovila School Farm, Nurmes	1963 1964	9 13	—	28 27	3	2 14	18 6	8 4	—	—	—
Antti Ahti, Vesilähti	1963 1964	18 12	—	49 36	1	12 4	24 24	12 8	—	—	—
Anna Lisa Brander, Urjala	1963 1964	11 12	—	28 39	1	6	21 27	—	—	—	—
Aavo Kyyhkynen, Mäntyharju	1963 1964	6 10	1	18 18	2	2 10	10 6	4 —	—	—	—
Otto Sainio, Kokemäki	1963 1964	7 6	—	23 29	—	2	12 12	4	5	—	—
Olava School Farm, Mikkeli	1963 1964	4 5	—	17 19	—	—	— 9	12 4	5	6	—



SIZE

One of the objectives of Finnsheep breeding has been to increase the size of animals for improving meat production. Originally, the Finnish indigenous sheep was fairly small with ewes weighing 40—50 kg, and rams, 50—70 kg, each. Certain fixed weights have been demanded for entry in the Flock Book, and as only by far the most large-sized individuals are admitted, selection being continued from generation to generation, it has been possible to increase the hereditary size of Finnsheep. Given adequate food conditions, mature ewes will have a weight of 55—65 kg — the largest ones up to 80 kg each. For rams, the corresponding figures are 80—90 kg, and over 100 kg, respectively.

SOME FLOCKS WITH OVER 2 YEARS OLD EWES AVERAGING NOT LESS THAN 60 KG EACH

	Ewes No.	Average weight, kg	Variation of weight
Palkainen Country Estate, Somerniemi	35	63	50—72
Grazing Trial Station, Mouhijärvi	24	66	48—87
Marti Suntuola, Asikkala	16	62	53—71
W. A. Westerstråhle, Rantasalmi	14	69	58—80
Yrjö Tamminen, Koski Hl.	11	63	48—72
Jukka Jaikanen, Rautalampi	9	71	66—76
Kujala School Farm, Lahti	5	65	58—72

CONFORMATION

Showing less muscle than the conformation of many sheep breeds reared for meat production, that of the Finnsheep breed — muscle content being a character the improvers wish to develop — is rapidly changing for the better. As early as today, many individuals have wide loins and hind quarters as well as a broad chest. Special attention is given the muscle content of the thighs which formerly was poor.

WOOL

Finnsheep wool differs essentially from the commonest wool types in that it is particularly lustrous, elastic, soft, and firm. Kemp is rare, and medullated wool, likewise, very little met with. Finnish wool thus stands for sound quality. Its fineness varies from 48 to 58 S°. Scouring loss is about 30 %. The sheep are shorn twice a year, in spring and in autumn. Ewes on an average produce annually about 2,5 kg of wool, and there are individuals that even reach figures such as 4 kg a year. When counting up the amount of wool yielded by a ewe and that of its five to six months old lambs an annual output of 4—5 kg is obtained.



LAMB PRODUCTION

To render utilization of prolificacy possible, the sheep in general must be characterized by hereditary rapidity of growth, and the ewes by good mothering, as well as milking, qualities. These factors combine decisively to influence lamb production, in view of which Finnsheep breeders have been

regularly calculating the aggregate weight of lambs per ewe at 5 months old. Finnsheep ewes that are good milkers invariably nurse two to three lambs and even more, so when adequately fed they will reach a large lamb production, which appears from the following table:

Name of ewe and Flock Book number	Annual lamb crops, in kg, yearlings included												At 2 years old on an average
	1	2	3	4	5	6	7	8	9	10	11	12	
Hupa 13566 V	—	72	109	79	53	88	115	97	118	110	62	75	91
Pinna 15681 V	29	92	90	99	117	120	107	114	78	78			99
Pili 16632 V	—	48	78	98	92	60	74	115	72	69			86
Kristina 16309 V	35	107	142	130	156	147	39	71	53				106
Lykky 15770 V	—	57	120	83	78	71	118	88	126				93
Piri 16632 V	—	70	82	89	53	126	69	114					86
Lulu 14946	72	66	84	103	115	71	88	85					87
Lilli 14945	63	59	71	97	125	80	92	78					82
Elisa 18015	—	75	103	62	90	87	79						83
Lipisa 15769 P	—	52	108	89	95	135							96



RELIABILITY OF TRANSMISSION — PRODUCTION RECORDING

The improvement of Finnsheep for breeding is based upon complete production recording. With all herds designed for improvement these measures are adopted: in autumn, ewes and rams are weighed, and so is the wool from each shearing; lambs born are numbered with earmarks; their respective sex, the litter size at birth, and their weight at five months

old are noted down. In that manner it is possible, when undertaking to select and procure sheep for improvement, to obtain full data on performance for many generations — both those upwards, and those collaterally, related — by which the degree of reliability in transmission can be assessed in each case.

PERFORMANCES RECORDED IN 1964 — MR YRJÖ TAMMINEN, KOSKI HL.

Rams and Ewes										Lambs						Weight of lambs prod. by ewe in 5 months
Ear-mark No.	Name and Flock Book No.	Born		Parents	Autumn weight, Sept. 19	Wool			Date	Lambs		Sex and number	Autumn weight, Sept. 19			
		Time	Size of litter			Time of shearing	At a time	In all		born	survived		Duration of growth, days	Indiv. weight	In all	
♂	Kupi 4322	8/3 1961	4	Kupsa 4822 Piste 17030	— 92	21/4 20/10	1,7 1,9	— 3,60		Sire of lambs born in 1964						— —
♀ 3	Kipi 20339	5/4 1960	2	Masa 4318 Pella 18131	— 65	12/3 20/10	1,3 2,0	— 3,30	9/4	3	3	♀ 119 ♀ 120 ♀ 121	151 160 160	43 35 35	— — 113	109
4	Kiri 20341	6/4 1960	3	Masa 4318 Tytti 20315	— 72	13/3 20/10	1,2 1,6	— 2,8	10/4	3	3	♀ 127 ♀ 128 ♀ 126	159	33 35 35	— — 103	97

PROMOTING SHEEP HUSBANDRY AND DIRECTING THE IMPROVEMENT OF NATIVE SHEEP IN FINLAND

data annually collected from the several flocks, and this material is accessible to investigators. The Association thus are informed about the most valuable strains and individuals existing in the country. They have divided the country into districts, each to be superintended by a functionary of theirs who every year visits breeders to register sheep in the Flock Book as well as to give professional recommendations and directions.

Thanks to this intensive form of activities, the Finnish Sheep Breeders' Association from its Head Office, as well as each of their functionaries within his proper district, keep absolute control of the improvement material, and are in the position, whenever they desire, to bring such persons as stand in need of sheep for breeding into contact with owners of the best flocks, or, by request, to arrange for sales of animals. The Association, as a matter of fact, have by now effected numerous transactions in animals for breeding, an activity concentrated especially on the autumn season when it is possible to select the best lambs of about five to six months old from among those born in the spring. For each animal procured by their agency, the Association furnish a complete pedigree in which performance data for its ancestors are included.



Finnish ram PATU, Flock-Book number 4397.

The improvement of Finnsheep is directed by the country-wide organization of sheep breeders in Finland, the Finnish Sheep Breeders' Association (*Lampanjalostusyhdistys*). In their office, which is in Helsinki, they keep the performance



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